

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STUART D. SCHOOLER

Appeal No. 2004-0200
Application No. 09/908,709

ON BRIEF

Before KIMLIN, OWENS, and JEFFREY T. SMITH, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from the final rejection of claims 1 and 3-9, which are all of the claims pending in the application.

THE INVENTION

The appellant claims a hybrid vehicle which includes an internal combustion engine, a battery-powered electric motor, and pedals for helping to recharge the electric motor's battery.

Claim 1 is illustrative:

An alternative fuel vehicle, comprising:
a battery supplying electrical energy;
an electric motor receiving said electrical energy from

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said battery and converting said electrical energy into mechanical energy;

a drive train receiving said mechanical energy for moving said vehicle;

pedals operable by an occupant of said vehicle to create mechanical energy;

a first generator converting said mechanical energy from said pedals to first electrical energy, said first electrical energy from said generator supplied to said electrical motor; and

an internal combustion engine supplying energy to said drive train.

THE REFERENCES

Dessert	4,181,188	Jan. 1, 1980
Deguchi et al. (Deguchi)	6,083,139	Jul. 4, 2000
Chung et al. (Chung)	6,114,775	Sep. 5, 2000

THE REJECTIONS

The claims stand rejected under 35 U.S.C. § 103 as follows:
claims 1, 3-6, 8 and 9 over Dessert in view of Deguchi, and
claim 7 over Dessert in view of Deguchi and Chung.

OPINION

We affirm the aforementioned rejections.

The appellant states that the claims stand or fall together (brief, page 2). Although an additional reference is applied to claim 7, the appellant does not separately argue that claim. We therefore limit our discussion to one claim, i.e., claim 1, which is the sole independent claim. See *In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c) (7) (1997).

Dessert discloses "a battery powered electric vehicle that can be charged by all free energy sources, namely, the sun, the wind, human muscles and momentum" (abstract). The vehicle has two power modules having pedals similar to bicycle pedals for driving generators to help recharge electric motor batteries or for directly helping to drive the vehicle's wheels (abstract; col. 1, line 66 - col. 2, line 2; col. 3, lines 53-58; col. 4, lines 39-42).

Deguchi discloses a hybrid vehicle having electric motors and a heat engine (abstract).

The examiner argues that it would have been *prima facie* obvious to one of ordinary skill in the art, in view of the combined teachings of Dessert and Deguchi, to include a small, lightweight internal combustion engine in Dessert's vehicle to provide means for recharging the batteries without pedaling, such as on uphill terrain, and to increase the overall power of the vehicle drive train (answer, pages 3-5).

The appellant argues that the use of an internal combustion engine is not congruent with the purpose of Dessert's vehicle which is restricted to free energy sources (brief, pages 3-4). Dessert discloses that the vehicle "can be charged by all free energy sources" (abstract). In view of Deguchi, however, one of

ordinary skill in the art would have appreciated the balance between the benefits of Dessert's clean operation and the effectiveness of Deguchi's internal combustion engine for recharging electric motor batteries. Consequently, the references, taken together, would have rendered it *prima facie* obvious to one of ordinary skill in the art to use a combination of Dessert's pedals and Deguchi's internal combustion engine for recharging the electric motor batteries in Dessert's vehicle.

The appellant argues that including an internal combustion engine in Dessert's vehicle would increase the weight of the vehicle sufficiently that the engine would have to be used to move the vehicle (brief, page 3). This argument is not persuasive because, as pointed out by the examiner (answer, page 5), small internal combustion engines were available at the time of the appellant's invention.

Moreover, the disclosure by Dessert that pedals are effective for recharging electric motor batteries (abstract; col. 1, line 66 - col. 2, line 2; col. 3, lines 53-58; col. 4, lines 39-42) would have fairly suggested, to one of ordinary skill in the art, including pedals in Deguchi's hybrid vehicle to help recharge the electric motor batteries.

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For the above reasons we conclude that a *prima facie* case of obviousness of the appellant's claimed invention has been established and has not been effectively rebutted by the appellant. Accordingly, we affirm the examiner's rejections.

DECISION

The rejections under 35 U.S.C. § 103 of claims 1, 3-6, 8 and 9 over Dessert in view of Deguchi, and claim 7 over Dessert in view of Deguchi and Chung, are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

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Edward C. Kimlin)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
Terry J. Owens)	
Administrative Patent Judge)	APPEALS AND
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Jeffrey T. Smith)	
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